

TREATY ON INTERNATIONAL COOPERATION IN THE AREA OF PATENTS

PCT

PRELIMINARY INTERNATIONAL REPORT ON PATENTABILITY

(Section II of the Treaty on International Cooperation in the Area of Patents)

Applicant's or Agent's File Ref. 51.773 WO	FOR FURTHER ACTION See Form PCT/IPEA/416.	
International Application No. PCT/EP2004/013581	International Filing Date (Month/Day/Year) November 30, 2004	Priority Date (Month/Day/Year) December 1, 2003
International Patent Classification (IPC) or National Classification and IPC G02B 23/12, G02B 27/01, G02B 23/18		
Applicant DURNER, Andreas et al.		
<p>1. This preliminary international examination report has been prepared according to Article 35 by the agency authorized to conduct preliminary international examinations and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 pages, including this cover sheet.</p> <p>3. This report is also accompanied by ATTACHMENTS, which include:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Office) consisting entirely of pages, namely:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Pages with the description, claims, and/or drawings, which have been revised and which form the basis of the present Report, and/or pages with corrections to which the Agency has agreed (see Rule 70.16 and Section 607 of the Administrative Guidelines).</p> <p style="margin-left: 40px;"><input type="checkbox"/> Pages which replace earlier pages, but which, in the opinion of the Agency, for the reasons indicated in Field No. 1, Section 4 and in the Supplemental Field, contain a change which exceeds the disclosure content of the international application in the originally filed version.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent only to the International Agency) consisting entirely of (please indicate type and number of electronic data storage medium/media), which contain(s) the sequence protocol and/or the associated tables in computer-readable form only, as indicated in the Supplemental Field pertaining to the sequence protocol (see Section 802 of the Administrative Guidelines).</p>		
<p>4. This report contains information on the following items:</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Field No. I Basis of the report</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. II. Priority</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. III Failure to provide an opinion concerning novelty, inventive step, or commercial viability.</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. IV Lack of unity of the invention.</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Field No. V Substantiated judgment under Article 35(2) concerning novelty, inventive step, or commercial viability; citations and explanations supporting this judgment.</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. VI Certain documents cited</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. V Certain defects in the international application</p> <p style="margin-left: 20px;"><input type="checkbox"/> Field No. VI Certain observations on the international application</p>		
Filing date of the request: June 30, 2005	Date of completion of this report: September 12, 2005	
Name and mailing address of the office assigned to perform the preliminary examination: European Patent Office D-80298 Munich Tel: +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Authorized Officer: Daffner, M. Tel: +49 89 2399-7087	

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Field No. I. Basis of the Report

1. With respect to **language**, this Report is based on the international application in the language in which the application was filed, unless otherwise indicated in this section.
 - ☐ The Report is based on a translation from the original language to the following language, which is the language of the translation filed for the following purpose:
 - ☐ international search (under Rules 12.3 and 23.1(b)).
 - ☐ publication of the international application (under Rule 12.4).
 - ☐ preliminary international examination (under Rule 55.2 and/or Rule 55.3).
2. With regard to the **elements** of the international application, this Report is based on *(replacement pages which were submitted to the application office in compliance with the request according to Article 14 are considered "originally filed" and are not attached to the application, because they do not contain any changes:*

Specification, pages:

1-17 as originally filed

Claims, Nos.:

1-29 received on July 21, 2005 with letter of July 15, 2005

Drawings, Pages:

1/6-6/6 as originally filed

☐ a sequence protocol and/or any associated tables – see Supplemental Field pertaining to the sequence protocol.

3. As a result of the changes, the following documents have been omitted:
 - ☐ the specification, pages:
 - ☐ the claims, nos.:
 - ☐ the drawings, sheets/figures:
 - ☐ the sequence protocol *(give precise information):*
 - ☐ any tables belonging to the sequence protocol *(give precise information):*
4. ☐ This report has been prepared without consideration of (some of) the changes attached to this report and listed below, because, in the opinion of Agency, for the reasons given in the Supplemental Field, they exceed the disclosure content in the originally filed version (Rule 70.2c).
 - ☐ the specification, pages:
 - ☐ the claims, nos.:
 - ☐ the drawings, sheets/figures:
 - ☐ the sequence protocol *(give precise information):*
 - ☐ any tables belonging to the sequence protocol *(give precise information):*

*If Section 4 applies, some or all of these pages can be provided with the comment "replaced".

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V. Substantiated judgment according to Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this judgment.

1. Judgment

Novelty (N)	Yes:	Claims 3, 6-29
	No:	Claims 1, 2, 4, 5

Inventive Activity (AI):	Yes:	Claims
	No:	Claims 1-29

Commercial Viability (CV):	Yes:	Claims 1-29
	No:	Claims

2. Documents and Explanations (Rule 70.7):

See attached page.

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The examination was based on Claims 1-29 in the version received with the letter of July 15, 2005.

The documents cited in the office action are numbered in the sequence in which they occur in the search report:

D1: WO 97/09652 A (B.V. OPTISCHE INDUSTRIE "DE OUDE DELFT")

D2: WO 02/077670 A (WILDER, DAVID; DURNER, ANDREAS)

D3: EP-A-1 273 958 (CANON KABUSHIKI KAISHA)

D4: US-A-6 046 712 (BELLER ET AL)

D5: WO 02/059654 A (NIGHT VISION CORPORATION; KOLLSMAN, INC;
FILIPOVICH, DANNY; FIORE, JAC)

1. The characterizing clause of Claim 1 is unclear, because it is impossible to determine what the detectable image is and what "real relationships" are in a direct view without restriction. In addition, the expressions "dimensions of the displayed image" and the "working together" of the camera, the display means, and the eyepiece lens are vague. It is not clear how these components work together.
2. The electronic spectacles according to Claim 1 are anticipated, for example, by the electronic spectacles according to document D1 (WO 97/09652):

Document D1 discloses electronic night-vision spectacles (see Abstract) comprising:

- an electronic camera integrated into the spectacles as primarily recording means for the user of the spectacles, the camera being provided with an objective lens and a CCD sensor;
- an image-processing unit downline from the camera, which electronically processes the image recorded by the camera and sends an output signal to the display means assigned to each eye for reproduction of the image (see page 11, lines 11-28); and
- an eyepiece lens, which is downline from each display means (see, for example, Fig. 6), where the camera, the display means, and the eyepiece lens are designed to work together in such a way that the dimensions of the displayed image which the user can detect during use corresponding to the real relationships which the user would see in a direct view without restriction (see Figs. 1, 6, and 8, page 5, line 34 to page 6, line 8, blending of images).

3. The following dependent claims do not contain any features which, in combination with the features of any of the claims to which they refer, fulfill the requirements of the PCT with respect to novelty or inventive activity. The reasons for this are as follows:
 - 3.1. Claim 2, concentric alignment, see document D1, Figs. 7 and 8.
 - 3.2. Claim 3, adjustable focus, is state of the art in the form of so-called "diopter adjustment". See also document D2 (WO 02/077670), page 10, lines 4-10.
 - 3.3. Claims 4-5, two cameras: see document D1.
 - 3.4. Claims 6 and 7, fixed carrier: see, for example, document D2, Fig. 6.
 - 3.5. Claims 8-13 define details of the sensors which are more-or-less obvious for a night-vision module.
 - 3.6. Claims 14-23 appear to be conventional in the field of CCD technology.
 - 3.7. Claim 24: Synchronization appears necessary to reproduce a stereoscopic image. Thus synchronization does not appear to be inventive, even if it is not demanded explicitly in the document.

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- 3.8. Claim 25 defines standard image screens.
- 3.9. Claims 26 and 27, battery, see document D2, Claim 20.
- 3.10. Claim 28: display of additional information, see, for example, document D5 (WO 02/059654, page 23, line 31, to page 24, line 9).
- 3.11. Claim 29, interface: see, for example, document D2, Claim 24, or document D4 (US 6,046,712).